

REMARKS

Applicants appreciate the Examiner's thorough consideration provided in the present application. Claims 1-18 are currently pending in the instant application. A complete listing of the claims has been provided hereinabove for the convenience of the Examiner. However, no claims have been amended by way of this response. Claims 1-3, 7 and 13 are independent. Reconsideration of the present application is earnestly solicited.

Reasons for Withdrawal of Finality of Office Action

As discussed in greater detail hereinafter, Applicants respectfully submit that the rejections under 35 U.S.C. § 103(a) are improper and should be withdrawn. Accordingly, the finality of the Final Office Action mailed on April 20, 2004 should be withdrawn.

If the Examiner persists in maintaining this rejection, Applicants submit that this response was not presented at an earlier date in view of the fact that Applicants are responding to new grounds of rejection, e.g., with newly discovered prior art as admitted by the Examiner, in a Final Office Action. In accordance with the requirements of 37 CFR 1.116, Applicants respectfully

request consideration of the instant response as the current application is in a condition for allowance.

Drawings

Applicants appreciate the Examiner's indication of acceptance of the formal drawings filed on November 8, 2000.

Claim Rejections Under 35 U.S.C. § 103

Claims 1-18 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Schwartz (U.S. Patent No. 5,426,517) in view of Patton et al. (U.S. Patent No. 6,102,846). This rejection is respectfully traversed.

Specifically, Applicants submit that the prior art of record fails to teach or suggest each and every limitation of the unique combination of limitations of the claimed invention. In addition, Applicants submit that the alleged combination of the prior art of record would not have been obvious to one of ordinary skill in the art. Accordingly, this rejection should be withdrawn.

For example, with respect to claim 1, Applicants submit that the prior art of record fails to teach or suggest each and every limitation of the unique combination of limitations of the claimed invention, including the feature(s) of:

“executing a function for *automatically* changing a dynamic range of at least a part of the reproduced image *that has been selected by an action of a viewer viewing the reproduced image.*” (emphasis added) Accordingly, this rejection should be withdrawn.

With respect to claim 2, Applicants submit that the prior art of record fails to teach or suggest each and every limitation of the unique combination of limitations of the claimed invention, including the feature(s) of: “executing a function for *automatically* changing a tone conversion characteristic of at least a part of the reproduced image *that has been selected by an action of a viewer viewing the reproduced image.*” (emphasis added) Accordingly, this rejection should be withdrawn.

With respect to claim 3, Applicants submit that the prior art of record fails to teach or suggest each and every limitation of the unique combination of limitations of the claimed invention, including the feature(s) of: “an *area specifying device which specifies a desired area from within an image reproduced by the image output device that has been selected by an action of a viewer viewing the reproduced image;* a tone conversion characteristic varying device which *automatically changes a tone conversion characteristic of at least a*

part of the image containing the area specified by the area specifying device.”
(emphasis added) Accordingly, this rejection should be withdrawn.

With respect to claim 7, Applicants submit that the prior art of record fails to teach or suggest each and every limitation of the unique combination of limitations of the claimed invention, including the feature(s) of: “executing a function for *automatically changing a dynamic range of at least a part of the reproduced image that has been selected by an action of a viewer viewing the reproduced image on the image output device.*” (emphasis added) Accordingly, this rejection should be withdrawn.

With respect to claim 13, Applicants submit that the prior art of record fails to teach or suggest each and every limitation of the unique combination of limitations of the claimed invention, including the feature(s) of: “executing a function for *automatically changing a tone conversion characteristic of at least a part of the reproduced image that has been selected by an action of a viewer viewing the reproduced image on the image output device.*” (emphasis added) Accordingly, this rejection should be withdrawn.

The Examiner has admitted that Schwartz does not teach or suggest automatically selecting at least a part of an image that has been selected by an action of a viewer (see page 3 of the Final Office Action, paragraph 4). The

Examiner has alleged that Patton teaches or suggests a modification of the Schwartz reference that would read on the claimed invention of claims 1-3, 7 and 13. Applicants submit that this alleged combination of the prior art of record would not have been obvious to one of ordinary skill in the art and/or the alleged combination of the prior art of record fails to teach or suggest each and every limitation of the unique combination of limitations of the claimed invention. Accordingly, this rejection should be withdrawn.

In the claimed invention, the function of changing the dynamic range of all or part of the playback image responsive to the "wishes of the viewer" occurs automatically. Therefore, after the viewer has selected a region that may require enhancement by an action of the viewer, e.g., either through a touch panel or with the use of a line-of-sight detection apparatus, the CPU changes the dynamic range of the portion of the image specified by the viewer and automatically reproduces a white-skip or blackening part, as necessary (see step S630, FIG. 6 of the present application to aid in the understanding of the present application).

In the Schwartz patent, an image processing system that enhances an image on a display in response to an input request from an operator is described. In Schwartz, the image enhancement is accomplished by

transforming the image to compensate for tone compression, e.g., the image is remapped automatically with a default tonal transform. However, as described by Schwartz, this process is a semi-automatic input process for inputting control points. The operator selects a region of an image that requires enhancement (either too light or too dark) with a cursor. Further, the "operator then has the option of specifying a desired value for that point which is different from the measured value. The software will then fit a cubic spline through the point which the operator has defined." (col. 13, lines 36-40 cited by Examiner) However, the tone is not varied unless the operator designates a new value different from the measured value.

Although the Examiner is persuaded that Schwartz does not teach or suggest automatically changing a dynamic range or tone conversion of a portion of an image selected by a user (an action of the user), the Examiner alleges that Patton et al. teaches or suggests this feature. Applicants submit that the Examiner has misinterpreted the teachings of the Patton et al. reference. Further, Applicants submit that if the Patton et al. reference is considered in its entirety, it is clear that one of ordinary skill in the art would not have modified the Schwartz system as alleged by the Examiner.

Specifically, Patton et al. appears to be related to a system for diagnosing and treating stress in patients based on individual user profiles that have been created from data collected relating to the physiological state of the patient. Patton et al. describes changing a sequence of images or the types of images that are seen by a patient to induce or overcome conditioned responses from the patient. However, neither Schwartz nor Patton et al. appear to teach or suggest automatically changing a tone conversion or a dynamic range of a part of an image based on a response from a user. In the claimed invention, a portion of an image is augmented or altered based on the response of the user. In contrast, Patton et al. replaces an entire image with another image.

The Examiner will note that since Patton et al. is directed at a system for diagnosing and treating stress, entire images are replaced by alternative images upon detecting changes in stress levels. Therefore, Applicants submit that Patton et al. in no way suggests selecting a part of an image for either tone conversion or dynamic range responsive to an action of a user. In fact, Patton et al. is not related to image enhancement, but instead replaces entire images with alternative images upon detecting levels of stress induced in a patient by changing physiological conditions, i.e., with a different type of image or with the next image in group or series of images. Accordingly, the Examiner's

opinion that it would have been obvious to alter the Schwartz reference with the alleged teachings of Patton et al. is traversed, as Patton et al. is not related to image enhancement or reproduction as alleged by the Examiner. Instead, Patton et al. is directed at diagnosing stress and replacing entire images with alternative images responsive to actions or physiological conditions of a user. Accordingly, this rejection should be withdrawn and the present application should be allowed to Issue.

CONCLUSION

Since the remaining references cited by the Examiner have not been utilized to reject the claims, but merely to show the state-of-the-art, no further comments are deemed necessary with respect thereto.

All the stated grounds of rejection have been properly traversed and/or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently pending rejections and that they be withdrawn.

It is believed that a full and complete response has been made to the Office Action, and that as such, the Examiner is respectfully requested to send the application to Issue.


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Appl. No.: 09/707,948
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Amendment dated July 20, 2004
Reply to Office Action of April 20, 2004
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In the event there are any matters remaining in this application, the Examiner is invited to contact Matthew T. Shanley, Registration No. 47,074 at (703) 205-8000 in the Washington, D.C. area.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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